

### **REMARKS**

Favorable reconsideration and allowance of the present application are respectfully requested in view of the following remarks.

Claims 38-76 are currently pending in the present application, including independent claims 38, 55, and 68. The claims have been renumbered in this Response, since, as pointed out at page 2 of the Office Action, the originally filed claims included claims 1-37 (not 1-38).

Independent claim 38, for instance, is directed to a wound or stacked paper product that comprises a first layer positioned adjacent to a second layer. The first and second layers are formed from at least one paper web that contains a surface that defines ridges and valleys. Bridging regions are formed into the surface of the paper web, and these bridging regions have a length sufficient to extend between the peaks of at least two of the ridges and have a length-to-depth ratio of from about 5:1 to about 40:1. The bridging regions at least partially obstruct the ridges and valleys of the first layer from mating with the ridges and valleys of the second layer *to inhibit nesting*.

As described in Applicant's specification, multi-layered wound or stacked paper products containing multiple layers of a paper web having ridges and valleys may exhibit a certain degree of "nesting." Nesting occurs when the ridges and valleys of one layer are placed adjacent to corresponding ridges and valleys of another layer and the ridges and valleys of two layers mate. Nesting causes the wound or stacked paper product to become more tightly packed, thereby reducing roll bulk and increasing the density of the roll. (Appl., p. 1, lines 22-30). Applicant's claimed paper product and methods, then, reflect the desirability of eliminating this bulk reduction and making the process of winding or stacking a final paper product more consistent and controllable. (Appl., p. 4, line 21 – p. 5, line 8).

In the Office Action, independent claims 38, 55, and 68 were rejected under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent No. 6,348,131 to Kershaw, et al. Kershaw, et al. is directed to multi-ply embossed absorbent paper products. The paper products of Kershaw, et al. are provided with undulations that may extend both longitudinally in the machine direction (or along the principal undulatory axis) and in the cross direction to provide the paper web or absorbent sheet with a biaxially undulatory

structure. (Col. 3, lines 28-39; col. 6, line 61 – col. 7, line 12; Fig. 4). Kershaw, et al. then provides embossing, using very specific embossing parameters, to the undulated web. (Col. 7, lines 12-15, lines 54-65, etc.). Examples of embossment patterns used for the paper products of Kershaw, et al. are shown in Figs. 6-12, wherein the embossments are arranged in floral patterns, hexagonal patterns, and a plurality of diamond-shaped arrays, repeating over the surface of the sheet. Typically the embossment patterns on the paper products of Kershaw, et al. extend over up to about 50% of the web. (Col. 8, lines 44-56; claim 1).

Applicant respectfully submits that the paper product and methods recited in independent claims 38, 55, and 68 would not have been obvious in view of the disclosure of Kershaw, et al. The first and second layers in Applicant's claims *are layers of a multi-layered wound or stacked paper product*. And the bridging regions that are formed into the surface of these layers specifically obstruct the ridges and valleys of the first layer of the wound or stacked paper product from mating with the ridges and valleys of the second layer of the wound or stacked paper product, which inhibits nesting. Such is not taught or suggested by Kershaw, et al.

In determining the differences between the prior art and the claims, the question under 35 U.S.C. § 103 is not whether the differences themselves would have been obvious, but whether the claimed invention *as a whole* would have been obvious. A part of this “claimed invention as a whole” inquiry requires consideration that Applicant has discovered a specific solution to the specific problem of *nesting in stacked or wound paper products*—where this solution involves forming bridging regions into a surface of a paper web that contains ridges and valleys so that those bridging regions (1) have a length sufficient to extend between the peaks of at least two of the ridges, and (2) have a length-to-depth ratio of from about 5:1 to about 40:1, so that the bridging regions at least partially obstruct the ridges and valleys of a first layer from mating with the ridges and valleys of a second layer *to inhibit nesting*.

The presently claimed inhibition of nesting in a final wound or stacked paper product is examined in Applicant's specification. For instance, Applicant's Examples show non-layered basesheets or non-layered, single-ply towels that are embossed with bridging regions (according to Applicant's claims) and are then wound onto cores to

make a final wound paper product. (Appl., pp. 16-25). When compared to conventionally-formed wound paper products, the wound paper products according to Applicant's claims exhibited a significantly lower percentage of nested "wraps" or layers.

No such *inhibited nesting in a multi-layered wound or stacked paper product* is disclosed or even contemplated by Kershaw, et al. The only mention of "nesting" in Kershaw, et al. concerns the binding of *two plies* together, and the disclosure specifically states:

During the binding of two or more paper plies together each ply may be *displaced* in the cross direction so that the "peaks" of the undulations of one ply are either bound with the peaks or the "valleys" of the undulations of the other ply. In this manner if the peaks of one ply are arranged to *nest* in the valleys of the other ply a relatively dense two ply web will be formed. If, on the other hand, the peaks and valleys of one ply are opposed to the peaks and valleys of the other ply a very thick, soft two ply web will be formed. *In this manner* the density of the two ply web can be readily controlled, depending on the application for which the paper product is intended.

(Col. 11, lines 10-20) (emphases added). Simply put, Kershaw, et al.'s specific emboss patterns apparently do not prevent "nesting" between the two *plies* in Kershaw, et al.'s multi-ply sheet. Rather, *physical displacement*—of one of the two plies in the cross direction so that the peaks and valleys of one ply are *opposed to* the peaks and valleys of the other ply—appears to be the only solution to possible "nesting" between two *plies* in Kershaw, et al. Thus, this disclosure from Kershaw, et al. not only fails to teach inhibition of nesting by way of specifically-formed bridging regions, but it fails to provide *any* teaching or suggestion regarding the inhibition of nesting *between the layers of a multi-layered wound or stacked paper product* as presently claimed by Applicant.

Therefore, the bridging regions of Applicant's claimed paper product and method were deliberately and particularly selected and optimized to have (1) a certain length and (2) a certain length-to-depth ratio in order to reduce nesting in a final multi-layered stacked or wound paper product. Applicant respectfully submits that Kershaw, et al. fails to render obvious the overall combination of limitations required by the product and methods set forth in Applicant's independent claims 38, 55, and 68.

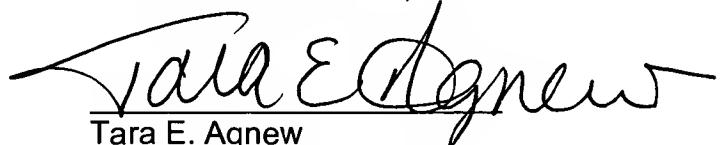
For at least the reasons set forth above, Applicant respectfully submits that independent claims 38, 55, and 68 patentably define over Kershaw, et al. Dependent claims 49 and 50 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Kershaw, et al. in view of U.S. Patent No. 5,048,589 to Cook. Further, dependent claims 39-48, 51-54, 56-67, and 69-76 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Kershaw, et al. Applicant respectfully submits that for at least the reasons indicated above relating to corresponding independent claims 38, 55, and 68, the dependent claims patentably define over the references cited. However, Applicant also notes that the patentability of the dependent claims certainly does not hinge on the patentability of independent claims 38, 55, and 68. In particular, it is believed that some or all of these claims may possess features that are independently patentable, regardless of the patentability of claims 38, 55, and 68.

As such, for at least the reasons set forth above, Applicant respectfully submits that the present claims patentably define over all of the prior art of record. It is believed that the present application is in complete condition for allowance and favorable action, therefore, is respectfully requested. Examiner Halpern is invited and encouraged to telephone the undersigned, however, should any issues remain after consideration of this Response.

Please charge any additional fees required by this Response to Deposit Account No. 04-1403.

Respectfully submitted,

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